

1 Amendments to the Claims:

2 This listing of claims will replace all prior versions, and
3 listings, of claims in the application: (Original) (Previously
4 Presented) (Currently Amended) (New) (Canceled)

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6 Listing of Claims:

7 1. (Currently Amended) A MOSFET for receiving an applied voltage
8 and a gate voltage, the MOSFET comprising,

9 a first terminal in a semiconductor material,

10 a gate terminal receiving the gate voltage, the gate being
11 disposed over a channel of the semiconductor material, the gate and
12 channel being curved defined by a gate curvature, the gate being
13 insulated from the semiconductor material, the channel having two
14 channel ends, the two channel ends being nonparallel nonaligned
15 channel ends, the curve of the gate and the channel are
16 noninflecting,

17 an insulator disposed between the gate and the semiconductor
18 material, and

19 a second terminal in the semiconductor material, the applied
20 voltage extends between the first terminal and the second terminal,
21 the gate voltage serving to control conduction between the first
22 terminal and the second terminal in the presence of the gate
23 voltage, the applied voltage serving to establish a diverging
24 electric field extending from the first terminal through the
25 channel to the second terminal, the MOSFET being a triode MOSFET,
26 the gate terminal and second terminal are coextensive in length.

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1 2. (Original) The MOSFET of claim 1 wherein,

2 the gate curvature is defined by a radius extending from a point
3 inside the first terminal.

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5 3. (Original) The MOSFET of claim 1 wherein,

6 the gate curvature of the gate is defined by a radius extending
7 from a point inside the first terminal, the gate curvature is less
8 than a semicircle.

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10 4. (Original) The MOSFET of claim 1 wherein,

11 the gate curvature is defined by a radius extending from a point
12 inside the first terminal, the gate curvature is a quarter circle.

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14 5. (Original) The MOSFET of claim 1 wherein,

15 the gate curvature is defined by a radius extending from a point
16 inside the first terminal, the gate curvature is an eighth circle.

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1 6. (Currently Amended) A MOSFET for receiving an applied voltage
2 and a gate voltage, the MOSFET comprising,
3 a source terminal in n-type silicon,
4 a gate terminal receiving the gate voltage, the gate being
5 disposed over a channel of the n-type silicon, the gate being
6 insulated from the n-type silicon, the channel having two channel
7 ends, the two channel ends being nonparallel nonaligned channel
8 ends, the curve of the gate and the channel are noninflecting,
9 an insulator disposed between the gate and the n-type silicon,
10 and
11 a drain terminal in the n-type silicon, the applied voltage
12 extends between the source terminal and the drain terminal, the
13 gate voltage serving to control conduction between the source
14 terminal and the drain terminal in the presence of the gate
15 voltage, the applied voltage serving to establish a diverging
16 electric field extending from the source terminal through the
17 channel to the drain terminal, the MOSFET being a triode MOSFET,
18 the gate terminal and second terminal are coextensive in length.

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20 7. (Original) The MOSFET of claim 6 further comprising,
21 a silicon substrate,
22 a p-type well disposed within the substrate, the source terminal
23 and drain terminal and channel being disposed in the p-type well.

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25 8. (Original) The MOSFET of claim 6 wherein,
26 the curve of the gate is defined by a radius extending from a
27 point inside the source terminal.

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1 9. (Original) The MOSFET of claim 6 wherein,

2 the gate curvature is defined by a radius extending from a point
3 inside the source terminal, the gate curvature is less than a
4 semicircle.

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6 10. (Original) The MOSFET of claim 6 wherein,

7 the gate curvature is defined by a radius extending from a point
8 inside the source terminal, the gate curvature is a quarter circle.

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11 11. (Original) The MOSFET of claim 6 further comprising,
12 a p-type silicon well.

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15 12. (Original) The MOSFET of claim 6 further comprising,

16 a source connector,

17 a source contact in the source connector for connecting the
18 source connector to the source terminal,

19 a drain connector, and

20 a drain contact in the drain connector for connecting the drain
21 connector to the drain terminal, the applied voltage being applied
22 between the source connector and the drain connector.

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1 13. (Original) The MOSFET of claim 6 further comprising,
2 a source connector,
3 a source contact in the source connector for connecting the
4 source connector to the source terminal,
5 a drain connector, and
6 a plurality of drain contacts in the drain connector for
7 connecting the drain connector to the drain terminal, the applied
8 voltage being applied between the source connector and the drain
9 connector.

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14 14. (Original) The MOSFET of claim 6 further comprising,
15 a p-type silicon well,
16 a source connector,
17 a source contact in the source connector for connecting the
18 source connector to the source terminal,
19 a drain connector, and
20 a drain contact in the drain connector for connecting the drain
21 connector to the drain terminal, the applied voltage being applied
22 between the source connector and the drain connector.

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1 15. (Original) The MOSFET of claim 6 further comprising,
2 a p-type silicon well,
3 a source connector,
4 a source contact in the source connector for connecting the
5 source connector to the source terminal,
6 a drain connector, and
7 a plurality of drain contacts in the drain connector for
8 connecting the drain connector to the drain terminal, the applied
9 voltage being applied between the source connector and the drain
10 connector.
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12 16. (New) The MOSFET of claim 1 wherein,
13 the gate curvature of the gate is defined by a radius extending
14 from a point inside the first terminal, the gate curvature is less
15 than or equal to a quartercircle.
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17 17. (New) The MOSFET of claim 6 wherein,
18 the gate curvature of the gate is defined by a radius extending
19 from a point inside the first terminal, the gate curvature is less
20 than or equal to a quartercircle.
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1 18 (New) A plurality of MOSFETS packed together, each of the
2 MOSFETS for receiving an applied voltage and a gate voltage, each
3 of the MOSFETS comprising,
4 a first terminal in a semiconductor material,
5 a gate terminal receiving the gate voltage, the gate being
6 disposed over a channel of the semiconductor material, the gate and
7 channel being curved defined by a gate curvature, the gate being
8 insulated from the semiconductor material, the channel having two
9 channel ends, the two channel ends being nonparallel nonaligned
10 channel ends, the curve of the gate and the channel are
11 noninflecting,
12 an insulator disposed between the gate and the semiconductor
13 material, and
14 a second terminal in the semiconductor material, the applied
15 voltage extends between the first terminal and the second terminal,
16 the gate voltage serving to control conduction between the first
17 terminal and the second terminal in the presence of the gate
18 voltage, the applied voltage serving to establish a diverging
19 electric field extending from the first terminal through the
20 channel to the second terminal, the MOSFETS being triode MOSFETS,
21 wherein,
22 the plurality of MOSFETS are aligned to each other by
23 alignment of the gate curvature of each of the MOSFETS for improved
24 packing density.

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1 19. (NEW) The MOSFET of claim 18 wherein,
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3 terminal.
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